

CITY OF SUGAR LAND

Water Quality Report

A hand holding a glass of water with a large splash, set against a dark blue background. The splash is dynamic, with water droplets frozen in mid-air. The glass is clear, showing the water inside. The hand is light-skinned and has a white sleeve visible at the bottom left.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent EPA required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what is in your drinking water.

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o' discusiones sobre este reporte en espanol, favor de llamar al tel. (281)275-2450.

2002 Water Quality Report for the Citizens of Sugar Land

Stormwater Pollution

The City's storm sewer system was designed to capture rainwater runoff and transport it into local creeks and rivers to prevent flooding. Storm sewer systems channel the runoff into water bodies with little or no treatment.

Stormwater pollution occurs when runoff water travels across the ground – picking up litter, debris, and other contaminants – and washes down the storm drain inlets. Stormwater pollution can come from sources such as lawn clippings, litter, fertilizer, pesticides, pet waste, automobiles, and common household cleaners.

Pollutants that end up in storm drains erode the beauty of Sugar Land's creeks and rivers and endanger drinking water and aquatic life.

Stormwater Regulations

Sugar Land is now regulated as a Phase II municipality under the National Pollutant Discharge Elimination System (NPDES). NPDES is a federal regulatory program to control discharges of pollutants to surface waters of the United States. Sugar Land is required to develop a Stormwater Management Program, choose appropriate best management practices for each of six minimum control measures, identify measurable goals, and develop a five-year implementation schedule.

The goal of the stormwater management program is to minimize discharge of pollutants to the City's creeks and rivers to the "maximum extent practicable" to protect water quality.

Stormwater Pollution Prevention is Everyone's Responsibility

- *Clean up after your pets.* Pet waste left on the ground contributes harmful bacteria, parasites, and viruses to our waterways, so it's important to clean up after your pet.
- *Don't litter.* Litter and debris impair water quality and may also be a hazard to wildlife.
- *Use a commercial car wash facility.* Washing your car at home not only uses more gallons of water than a commercial car wash, but also can introduce soap, oil, and engine grime into our waterways.
- *Never apply fertilizer or pesticides before a heavy rain.* The chemicals will not benefit your lawn, but will wash down the storm drain and into the City's creeks and rivers.
- *Properly dispose of household chemicals.* Follow the disposal instructions on all chemical products. To dispose of Household Hazardous Waste (HHW), contact Fort Bend HHW Recycle Center at (281) 342-5226, www.co.fort-bend.tx.us (Quick Link – Recycle Center).

For more information on stormwater management, contact Sugar Land Public Works Department at (281) 275-2450, www.sugarlandtx.gov.

About the Following Page

The page that follows lists all of the federally regulated or monitored constituents which have been found in your drinking water. The Environmental Protection Agency (EPA) requires water systems to test up to 97 constituents.

Secondary Constituents

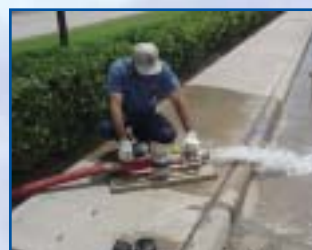
Many constituents (such as calcium, sodium, or iron), which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point-of-use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. However, the presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Hotline at 1-800-426-4791.

Your Water Source

The City of Sugar Land water supply is comprised of two water systems: the North Sugar Land System and the South Sugar Land System. Both water systems use ground water produced from the Gulf Coast Aquifer System that consists of the Beaumont Clay, Chicot, Evangeline and Jasper aquifers. The City's water is produced primarily from the Chicot and Evangeline aquifers, which produce abundant, high quality water and require only disinfection before use. The Texas Commission on Environmental Quality (TCEQ) will be reviewing all of the drinking water sources in Texas. The source water assessment process will be completed within three years. It is important to protect your drinking water by protecting your water source.



Your Water Cycle

After "your water" is pumped from the aquifer, it then travels through one of the City's state-of-the-art water treatment facilities. Chlorine is added as a disinfectant to protect against microbial contaminants. A fluoride supplement is added to help prevent tooth decay. Corrosion inhibitors are also added to reduce corrosion of metal components within the homeowner's private plumbing system. After passing a series of rigorous tests, your water then travels to your residence or place of business where you are provided with top quality and absolutely safe water.

Your Water Quality

The TCEQ is responsible for overseeing the state's environmental areas, which includes the City of Sugar Land's water quality. The TCEQ collects and analyzes samples for metals, minerals, volatile and semi-volatile organic compounds, chlorine by-product compounds and radiological compounds. The TCEQ has rated Sugar Land as having a "Superior" water system, their highest rating. Please refer to the color coded North and South system report on the following page. A color-coded City map is also provided so you may determine which water system provides service to you.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, and people with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

| | | | | | | | | |
|---|---|---------------------------|-------------------------------------|--|--------------|-----------------|---|--|
| North System | Year | Constituent | Highest Level of Any Sampling Point | Range of Detected Levels | MCL | MCLG | Unit of Measure | Source of Constituent |
| | 2002 | Arsenic | 2.6 | 2.6000-2.6000 | 50 | 0 | ppb | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| | 2002 | Barium | 0.187 | 0.1870-0.1870 | 2 | 2 | ppm | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| | 2002 | Fluoride | 0.7 | 0.7000-0.7000 | 4 | 4 | ppm | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| | 2002 | Nitrate | 0.07 | 0.0700-0.0700 | 10 | 10 | ppm | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| | 2002 | Selenium | 13.7 | 13.7000-13.7000 | 50 | 50 | ppb | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines. |
| | 2002 | Gross Alpha | 7.8 | 5.4000-7.8000 | 15 | 0 | pci/1 | Erosion of natural deposits. |
| | 2002 | Combined Radium 226 & 228 | 0.8 | 0.4000-0.8000 | 5 | 0 | pci/1 | Erosion of natural deposits. |
| | 2002 | Gross beta emitters | 4.4 | 3.1000-4.4000 | 50 | 0 | pci/1 | Decay of natural and manmade deposits. |
| Inorganics | Organics | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| | Disinfection Byproducts | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| | Unregulated Contaminants | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| | Year | Constituent | The 90th Percentile | Number of Sites Exceeding Action Level | Action Level | Unit of Measure | Source of Constituent | |
| | 2001 | Copper | 0.5600 | 0 | 1.3 | ppm | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. | |
| | 2001 | Lead | 1.5000 | 0 | 15 | ppb | Corrosion of household plumbing systems; Erosion of natural deposits. | |
| | Total Coliform | | NOT DETECTED | | | | | |
| | Fecal Coliform | | NOT DETECTED | | | | | |
| | | | | | | | | |
| Lead and Copper | DEFINITIONS | | | | | | | |
| | Maximum Contaminant Level (MCL) | | | | | | | |
| | The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. | | | | | | | |
| | Maximum Contaminant Level Goal (MCLG) | | | | | | | |
| | The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety. | | | | | | | |
| | Treatment Technique (TT) | | | | | | | |
| | A required process intended to reduce the level of a contaminant in drinking water. | | | | | | | |
| | Action Level (AL) | | | | | | | |
| | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow. | | | | | | | |
| NTU - Nephelometric Turbidity Units | | | | | | | | |
| MFL - million fibers per liter (a measure of asbestos) | | | | | | | | |
| pCi/l - picocuries per liter (a measure of radioactivity) | | | | | | | | |
| ppm - parts per million, or milligrams per liter (mg/l) | | | | | | | | |
| ppb - parts per billion, or micrograms per liter (Mg/l) | | | | | | | | |
| ppt - parts per trillion, or nanograms per liter | | | | | | | | |
| ppq - parts per quadrillion, or picograms per liter | | | | | | | | |

| South System | Year | Constituent | Highest Level of Any Sampling Point | Range of Detected Levels | MCL | MCLG | Unit of Measure | Source of Constituent |
|--------------------------|----------------|---------------------------|-------------------------------------|--|--------------|-----------------|---|--|
| | 2002 | Arsenic | 3 | 3.0000-3.0000 | 50 | 0 | ppb | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| | 2002 | Barium | 0.2 | 0.2000-0.2000 | 2 | 2 | ppm | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| | 2002 | Fluoride | 0.9 | 0.9000-0.9000 | 4 | 4 | ppm | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| | 2002 | Selenium | 3 | 3.0000-3.0000 | 50 | 50 | ppb | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines. |
| | 2002 | Gross Alpha | 10.1 | 0.0000-10.1000 | 15 | 0 | pci/l | Erosion of natural deposits. |
| | 2002 | Combined Radium 226 & 228 | 1.8 | 0.8000-1.8000 | 5 | 0 | pci/l | Erosion of natural deposits. |
| | 2002 | Gross beta emitters | 4.5 | 0.0000-4.5000 | 50 | 0 | pci/l | Decay of natural and manmade deposits. |
| Organics | | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| Disinfection Byproducts | | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| Unregulated Contaminants | | | NOT TESTED FOR OR NOT DETECTED | | | | | |
| Lead and Copper | Year | Constituent | The 90th Percentile | Number of Sites Exceeding Action Level | Action Level | Unit of Measure | Source of Constituent | |
| | 2001 | Copper | 0.3110 | 0 | 1.3 | ppm | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. | |
| | 2001 | Lead | 3.9000 | 0 | 15 | ppb | Corrosion of household plumbing systems; Erosion of natural deposits. | |
| | Total Coliform | | NOT DETECTED | | | | | |
| | Fecal Coliform | | NOT DETECTED | | | | | |

For more information,
contact the City of Sugar Land
Public Works Department.

call ---

281-275-2450

write ---

City of Sugar Land
Public Works Department
P.O. Box 110
Sugar Land, TX 77487

visit the City's Web site---

www.sugarlandtx.gov

To participate in public discussions regarding the City's water quality, contact City Hall at 281-275-2700 for a list of upcoming Council Meetings.

Your Public Works Department at Work



Water Production & Distribution Profile

| | |
|-----------------------------|--|
| Annual system demand | - 4.8 billion gallons |
| Maximum peak day | - 23.4 million gallons |
| System Capacity | - 37.58 million gal/day |
| Daily avg demand | - 13.14 million gal |
| Daily avg demand per capita | - 197 gal |
| Number of wells | - 13 |
| Average well depth | - 1,250 ft |
| Ground Storage Facility | - 9.67 million gal |
| Elevated Storage Facilities | - 4.5 million gal |
| Miles of distribution line | - 321 miles |
| Number of water meters | - 20,940 |
| Number of fire hydrants | - 2,560 |
| Number of valves | - 3,834 |
| Supply Ground Water Source | - Chicot, Evangeline, and Jasper Aquifers. |



City of Sugar Land
Public Works Department
P.O. Box 110
Sugar Land, TX 77487

PRESORTED
STANDARD
U.S. POSTAGE
PAID
SUGAR LAND, TX
PERMIT NO. 8